Remarks/Arguments

Claims 1 and 3-17 are currently pending. Claims1 and 5 are amended. Such amendments do not add new matter and are not made for reasons of patentability. Rather the amendments explicitly state what was inherent in the claims as previously presented, specifically that the polymer has a desired dissolution rate. Reconsideration of the pending claims in view of the Declaration under 35 USC § 1.132 provided herewith and the remarks presented herein is respectfully requested.

Rejection Under 35 U.S.C. §112

The Examiner states that Claims 1-8 stand rejected under 35 U.S.C.§112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse.

Applicants make note that the Examiner's statement that Claims 1-8 are rejected is problematic for at least two reasons. First, as noted above, Claim 2 was canceled in Applicants' response the first action provided by Examiner Thornton. Second, Claim 8 is part of a series of claims (Claims 6-11) that depend directly or indirectly from Claim 5. Absent the Examiner's comments as to why Claim 9-11 meet the requirement of the Examiner's understanding of § 112, second paragraph, Applicants uncertain as to the status of such Claims 9-11, and respectfully request clarification. Notwithstanding the above, Applicants' response to the instant rejection assumes that Claims 1 and 3-11 stand rejected under 35 USC §112.

As mentioned above, Applicants present herewith the Declaration of Dr. Andrew Bell as a person of skill in the chemical arts related to the exo/endo isomerism of polycyclic olefin monomers, the synthesis of such monomers by a variety of methods, including the Diels-Alder reaction,

and the polymerization of such monomers to form polymers. Applicants respectfully assert that Dr. Bell's conclusion regarding Claims 1 and 3-11:

> I believe that Claims 1 and 5 of the instant application and Claims 3-11 which respectfully depend directly or indirectly therefrom, are clear, unambiguous and appropriate for defining the scope of an invention that is pioneering in its discovery that the dissolution rate of a polycyclic olefin based polymer can be controlled by selecting at least one type of repeat unit having a desired exo mole percent for incorporation into such a polymer

is clear, unambiguous and based upon many years of experience in these arts. Additionally, Dr. Bell has provided (see, Attachment 'A' of the Declaration) a reference that supports fully his conclusions. It should also be noted that Dr. Bell is of the opinion that the subject matter of the instant application is pioneering, hence Applicants respectfully request that such an opinion be included in the Examiner's reconsideration of the instant application requested below.

Therefore in view of Dr. Bell's Declaration, Applicants request that the rejection under 35 USC §112, second paragraph, be withdrawn.

Rejections Under 35 U.S.C. §102(b) and (e)

Applicants make note that all of the rejections in the current Office Action reference only Claim 1 of the application. While the second independent claim, Claim 5, recites language similar to that of Claim1, the third independent claim, Claim 12, does not. Therefore, Applicants have no basis to present a cogent argument regarding the rejection of Claim 12 and Claims 13-17 which depend, directly or indirectly therefrom.

Therefore, the argument presented below for each of the art cited is necessarily directed only to the first two independent claims and those claims that depend therefrom (Claims 1 and 3-11). However, Applicants request that should the Examiner find such argument persuasive, that the Examiner apply what is believed appropriate from such argument to

Claims 12-17. Further, Applicants respectfully request clarification of the status of Claims 12-17 if the next action is not a Notice of Allowance.

Kinsho et al. (US 6,284,429)

The Examiner states that Claims 1 and 3-17 stand rejected under 35 U.S.C. §102(b) as being clearly anticipated by Kinsho et al (US 6,284,429 B1, hereinafter "Kinsho"). Applicants traverse.

The embodiments of the instant invention are all related to the Applicants' discovery that the value of the exo mole percent of a polycyclic olefin derived repeat unit incorporated into a polycyclic olefin derived resin unexpectedly affected the dissolution rate of such polymer. Thus by selecting a desired exo mole percent for the monomer used to form repeat units, Applicants discovered, and through experimentation obtained an understanding thereof, that allowed for the submitting of the instant application.

Claims 1 and 5 as currently presented capture the embodiments of the present invention by reciting:

> A photoresist composition comprising a polymer having a desired dissolution rate, said polymer comprising at least one polycyclic olefin derived type of repeat unit having a desired exo mole percent, where the desired exo mole percent is greater than or less than the expected exo isomer mole percent for a polycyclic olefin monomer from which the polycyclic olefin type of repeat unit is derived, such expected exo isomer mole percent based on the thermodynamic equilibrium of the isomers of such monomer that are obtained from a Diels-Alder reaction used to form such monomer. (Claim 1 in its entirety); or
>
> A photoresist composition comprising a polycyclic olefin based polymer having a desired dissolution rate, said polymer comprising at least one polycyclic olefin derived type of repeat unit having a fluorinated carbinol pendent group ... where such repeat unit has an exo isomer mole percent for the carbinol pendent group that is greater than or less than the expected exo isomer mole percent for the at least one polycyclic olefin monomer, such expected exo isomer mole percent based on the thermodynamic equilibrium of the

isomers of such monomer that are obtained from a Diels-Alder reaction used to form such monomer. (Claim 5, in pertinent part)

Thus each of the above claims, as well as the claims that depend therefrom, recite a polymer having a desired dissolution rate and how such dissolution rate is obtained through including in the polymer a type of repeat unit that has an exo mole percent that is of a value greater than or less than an expected exo mole percent.

It is well established (see, MPEP §2131) that where a claim of an application being examined are alleged to be anticipated by a prior reference, such reference must provide a disclosure of each element or limitation presented in the claim for which such a rejection is alleged.

Applicants respectfully assert that Kinsho does not meet this required standard. While the Examiner is correct that Kinsho discloses the exo form of 2-alkylbicyclo[2,2,1]heptan-2-yl, Kinsho DOES NOT recognize, teach or even suggest that there is any relationship between the exo mole percent of the disclosed material and the dissolution rate of a polymer that incorporates such a material as a repeating unit thereof. Further, as Applicant noted in the instant application (see, paragraph [0013]) that the relationship recited in Claims 1 and 5 was unexpected, and further in view of Dr. Bell's statement in his Declaration that he believe the instant invention to be pioneering, there can be NO assertion of inherency. Therefore, as Kinsho does not provide a teaching, disclosure or suggestion of all the elements recited in Claims 1 and 5, or in the claims that depend therefrom, the current rejection under 35 USC §102 (b) is incorrect and must be withdrawn. Such action is earnest requested.

Shin et al. (US 2003/0004289)

The Examiner states that Claims 1 and 3-17 stand rejected under 35 U.S.C. §102(e) as being clearly anticipated by Shin et al (US 2003/0004289 A1, hereinafter "Shin")). Applicants traverse.

Applicants assert the argument presented above with respect to Kinsho as being applicable to Shin. Thus while the Examiner's observations regarding what Shin discloses at paragraphs [0057] – [0059], [0072]-[0074], [0097]-[0099] and [0116]-[0120] all appear to be accurate observations, as Applicants asserted for the Examiner's observation in Kinsho, the observations pointed to in Shin do not relate to, or disclose, each of the specific elements or limitations of Claims 1 and 5 or those of any of the claims that depend therefrom.

Therefore, Shin also DOES NOT meet the requirement of a rejection under any section of §102 as stated in MPEP §2131 and must be withdrawn. Such action is earnest requested.

Boardman et al (US 6,358,675)

The Examiner states that Claims 1 and 3-17 stand rejected under 35 U.S.C. §102(e) as being clearly anticipated by Boardman et al (US 6,358,675 B1, hereinafter "Boardman"). Applicants traverse.

Applicants assert the argument presented above with respect to Kinsho and Shin as being applicable to Boardman. Thus while the Examiner's observations regarding what Boardman discloses at col. 11, ln. 45 – col. 12, ln. 6; Example 9; col. 12, ln. 8-27; and Example 10 all appear to be accurate observations, as Applicants asserted for the Examiner's observation in Kinsho and Shin, the observations pointed to in Boardman do not relate to, or disclose, each of the specific elements or limitations of Claims 1 and 5 or those of any of the claims that depend therefrom.

Therefore, Boardman also DOES NOT meet the requirement of a rejection under any section of §102 as stated in MPEP §2131 and must be withdrawn. Such action is earnest requested.

Poss et al (2003/0232276)

The Examiner states that Claims 1 and 3-17 stand rejected under 35 U.S.C. §102(e) as being anticipated by Poss et al 2003/0232276 A1, hereinafter "Poss"). Applicants traverse.

Applicants assert the argument presented above with respect to Kinsho, Shin and Boardman as being applicable to Poss. Further to this argument, Applicants direct the Examiner's attention to the portion of that argument that asserts that any inference of cited art inherently disclosing or teaching the subject matter recited in Applicants' claims, is inappropriate given Dr. Bell's Declaration and Applicants' statements in the instant application, particularly at paragraph [0013].

Poss only mentions, at paragraph [0016], that the compounds of his Formula 1 may exist in isomeric form where one such form could be endo/exo isomers. There is NO OTHER reference to such isomeric forms within Poss. Therefore Poss never recognized that a desired exo mole percent of any of the compounds disclosed therein would have unexpected dissolution properties. Absent such recognition, it CANNOT be said that Poss provides a disclosure, teaching or suggestion of those properties as recited in Applicants' Claim 1 and 5 and the claims that depend therefrom.

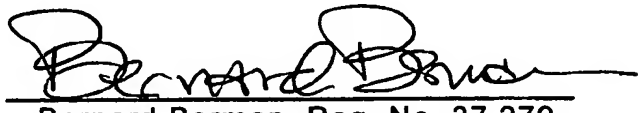
It must follow then that Poss also DOES NOT meet the requirement of a rejection under any section of §102 as stated in MPEP §2131 and must be withdrawn. Such action is earnest requested.

As noted just prior to the argument presented above with respect to Kinsho, the Office Action is silent on how any of the art cited relates to

Applicants' Claims 12-17. This silence makes it impossible to present specific, cogent argument for such claims. However, as none of Kinsho, Shin, Boardman or Poss recognized the specific effect on dissolution rate obtained by providing to the polymer a repeat unit having a desired exo mole percent, Applicant asserts that none of these cited references could be used to sustain a rejection of such claims under any section of 35 USC §102. .

Applicant having responded to each of the rejections to the extent possible, respectfully asserts that Claims 1 and 3-17 are in condition for allowance. Action to that effect is earnestly sought. If, however the Examiner's next action is anything other than a Notice of Allowance, the Examiner is requested to call the undersigned to schedule a telephonic interview. The undersigned is available during normal business hours, East Coast Time.

Respectfully submitted,

By 
Bernard Berman, Reg. No. 37,279

July 3, 2006

c/o Promerus, LLC
9921 Brecksville Rd
Brecksville, Ohio 44141
(440) 922-1469
bernie.berman@promerus.com